EWSD

Wind Speed and Direction Sensors

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Product Overview

The EWSD wind speed and direction sensor is designed to give an analogue output of the wind speed and direction values. This is suitable for applications such as automatic window closure and outside air damper control. The units are manufactured from anodized aluminium alloy, UPVC and stainless steel with moulded polypropylene cups. THe units are lightweight (less than 250 grams) yet very robust.

Features

- Wind Speed and Direction analogue outputs
- Damped output for a stable control signal

Product Specifications

Electrical Connections:	25m cable (max 200m)
Supply Voltage to Control Box::	
Voltage output	24Vac @ 10mA approx
Current output	9-15Vdc @10mA approx
Wind Speed:	
Sensor	Hall effect solid state magnetic switch
Range	0-50m/sec
Output:	0-5Vdc, 0-10Vdc or 4-20mA
Min start speed:	0.5m/sec
Accuracy:	+/-5 % or 1.5m/sec
Threshold	<1.5m/sec
Wind Direction:	
Sensor	Precision conductive potentiometer
Range	10 to 360deg
Output	0-5Vdc, 0-10Vdc or 4-20mA
Mechanical travel	360 deg endless travel
Accuracy	+/- 5deg
Resolution	Better than 1 deg
Threshold	<1.5m/sec
Ambient Temp. Range:	-20 to +60'C
Weight:	<250gms
Protection:	IP65
Country of Origin:	United Kingdom

Order Codes

EWSD-10	Wind Speed and Direction Sensor - Voltage output (specify 0-5 or 0-10Vdc)
EWSD-20	Wind Speed and Direction Sensor - Current output

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Installation

Siting

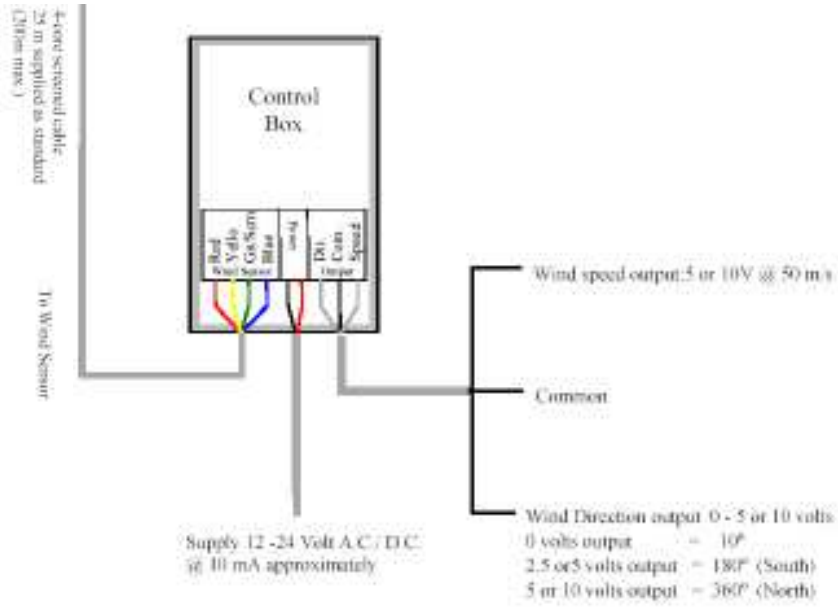
It is important to choose a site carefully to mount the unit. Sheltered sites should be avoided, as should exposed sites unless there is a requirement to measure wind speed under exposed conditions. Mounting on the wall of a building may also shelter the unit, leading to inaccurate readings.
It should be noted that the windspeed increases exponentially with the height above the ground, for the first 20 metres. It follows that mounting on a tall mast will lead to higher windspeeds. A good recommended height is between 2 and 9 metres above ground, where possible.
Mounting on a flat roof should also be avoided as this can lead to inaccurate readings due to turbulence and eddies.
If the unit is to be mounted near to the ground, anti-vandalism measures may be required. Any protection of this nature should not obstruct the windflow to the unit.
NB the unit should be mounted with the direction vane at the top and the speed cups at the bottom.
The unit mounting arm should point north.

Mast

The units are designed to be mounted to a mast of between 30-50mm diameter by means of a V shaped clamp and bracket. This allows simple orientation to north using the compass provided: this is the only set up required.

Connection

EWSD-10
Voltage output



Connection

EWSD-20
Current output